

(FILE 'HOME' ENTERED AT 19:10:43 ON 29 FEB 2004)

FILE 'STNGUIDE' ENTERED AT 19:10:54 ON 29 FEB 2004

FILE 'HOME' ENTERED AT 19:11:09 ON 29 FEB 2004

FILE 'REGISTRY' ENTERED AT 19:11:17 ON 29 FEB 2004

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 STRUCTURE UPLOADED
L5 27 S L1 FULL
L6 27 S L2 FULL
L7 0 S L3 FULL
L8 0 S L4 FULL
L9 SCREEN 2067
L10 STRUCTURE UPLOADED
L11 QUE L10 AND L9
L12 1 S L11 FULL
L13 SCREEN 2067
L14 STRUCTURE UPLOADED
L15 QUE L14 AND L13
L16 8 S L15 FULL

FILE 'CAPLUS' ENTERED AT 19:25:58 ON 29 FEB 2004

L17 6 S L16

FILE 'REGISTRY' ENTERED AT 19:27:06 ON 29 FEB 2004

FILE 'CAPLUS' ENTERED AT 19:27:06 ON 29 FEB 2004

=>

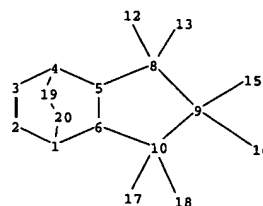
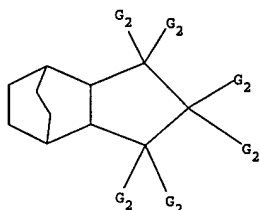
10/079,348 2/20/02

Lee, G Sa

Jung, SC

Shin, K.S.

only found Nb—



chain nodes :

12 13 15 16 17 18

ring nodes :

1 2 3 4 5 6 8 9 10 19 20

chain bonds :

8-12 8-13 9-15 9-16 10-17 10-18

ring bonds :

1-2 1-6 1-20 2-3 3-4 4-5 4-19 5-6 5-8 6-10 8-9 9-10 19-20

exact/norm bonds :

8-12 8-13 9-15 9-16 10-17 10-18

exact bonds :

1-2 1-6 1-20 2-3 3-4 4-5 4-19 5-6 5-8 6-10 8-9 9-10 19-20

G1:CH₂,O,S

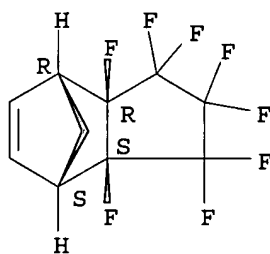
G2:Cl,Br,F,I,CF₃

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:Atom 9:Atom 10:Atom 12:Atom 13:Atom
15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom

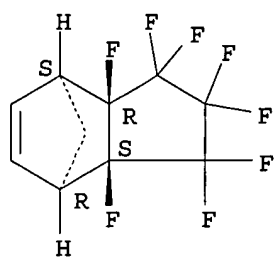
L17 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1993:102563 CAPLUS
 DN 118:102563
 TI Selective reaction with exo-isomers in ring-opening olefin metathesis polymerization (ROMP) of fluoroalkyl-substituted norbornene derivatives
 AU Seehof, Norbert; Grutke, Stefan; Risse, Wilhelm
 CS Fachbereich Phys. Chem.-Polym., Philipps Univ., Marburg, W-3550, Germany
 SO Macromolecules (1993), 26(4), 695-700
 CODEN: MAMOBX; ISSN: 0024-9297
 DT Journal
 LA English
 AB Fluoroalkyl-substituted bicyclic and tricyclic olefins were polymerized by ROMP. The monomers used were mixts. of exo- and endo-isomers of 5,5,6-trifluoro-6-(trifluoromethyl)spiro(bicyclo[2.2.1]hept-2-ene-7,1'-cyclopropane), 5,6-difluoro-5-(trifluoromethyl)-6-(heptafluoroisopropyl)bicyclo[2.2.1]hept-2-ene, and 2,3,3,4,4,5,5,6-octafluorotricyclo[5.2.1.0^{2,6}]dec-8-ene obtained by the Diels-Alder reaction of cyclopentadiene and spiro[2.4]hept-4,6-diene with perfluorinated olefins. The polymns. were carried out with a conventional catalyst based on WCl₆. The exo-isomers were more reactive than the corresponding endo-isomers. This difference in reactivity was larger for monomers containing larger substituents. A model based on steric repulsion was proposed to describe the selectivity for polymerization of the exo-isomers.
 IT 146236-53-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and structure of)
 RN 146236-53-5 CAPLUS
 CN 4,7-Methano-1H-indene, 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-, (3a α ,4 α ,7 α ,7a α)-, polymer with (3a α ,4 β ,7 β ,7a α)-1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)
 CM 1
 CRN 145985-66-6
 CMF C10 H6 F8

Relative stereochemistry.



CM 2
 CRN 145921-50-2
 CMF C10 H6 F8

Relative stereochemistry.



L17 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:5311 CAPLUS
 DN 138:63829
 TI Photoresist monomers, polymers thereof and photoresist compositions
 containing the same
 IN Lee, Geun Su; Jung, Jae Chang; Shin, Ki Soo
 PA S. Korea
 SO U.S. Pat. Appl. Publ., 13 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003003379	A1	20030102	US 2002-79348	20020220
	JP 2003040931	A2	20030213	JP 2002-122435	20020424
PRAI	KR 2001-34603	A	20010619		

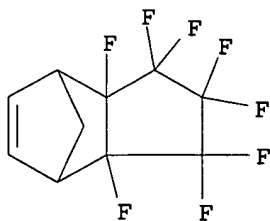
AB The present invention relates to photoresist monomers of formula I (X1-2 = C1-10 alkylene, O,S; Y1-8 = halogen, halogen substituted alkyl; l,m = 0-3) photoresist polymers of it, and photoresist compns. containing the same. The photoresist composition has excellent etching resistance, heat resistance and adhesiveness to a wafer, and is developable in aqueous tetramethylammonium hydroxide (TMAH) solution In addition, the photoresist composition has low light absorbance at 157 nm wavelength, and thus is suitable for a photolithog. process using UV light sources such as VUV (157 nm) in fabricating a minute circuit for a high integration semiconductor device.

IT 479195-51-2P 479195-52-3P 479195-54-5P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (fluoropolymer for photoresist compns.)

RN 479195-51-2 CAPLUS
 CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 1-ethyl-1H-pyrrole-2,5-dione and 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)

CM 1

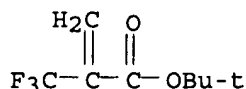
CRN 133205-28-4
 CMF C10 H6 F8



my case

CM 2

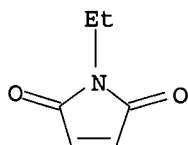
CRN 105935-24-8
 CMF C8 H11 F3 O2



CM 3

CRN 128-53-0

CMF C6 H7 N O2



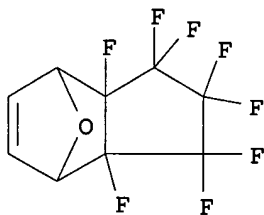
RN 479195-52-3 CAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-4,7-epoxy-1H-indene and 1-ethyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 479195-48-7

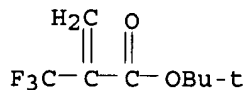
CMF C9 H4 F8 O



CM 2

CRN 105935-24-8

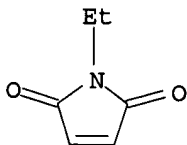
CMF C8 H11 F3 O2



CM 3

CRN 128-53-0

CMF C6 H7 N O2



RN 479195-54-5 CAPLUS

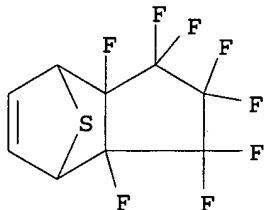
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 1-ethyl-1H-pyrrole-2,5-dione and 1,1,2,2,3,3,3a,7a-octafluoro-

2,3,3a,4,7,7a-hexahydro-4,7-epithio-1H-indene (9CI) (CA INDEX NAME)

CM 1

CRN 479195-50-1

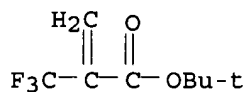
CMF C9 H4 F8 S



CM 2

CRN 105935-24-8

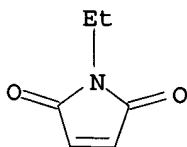
CMF C8 H11 F3 O2



CM 3

CRN 128-53-0

CMF C6 H7 N O2



L17 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:849708 CAPLUS

DN 137:360313

TI Fluorinated cycloolefin polymers, processes for preparation of fluorinated cycloolefin monomers and polymers thereof, and use of the same

IN Sunaga, Tadahiro; Kouno, Hiroshi; Kawamura, Kazumori; Ochiai, Takashi; Shigematsu, Shigeto; Nakano, Takashi; Morita, Tomoyuki; Io, Hirofumi; Yamamoto, Yoshihiro

PA Mitsui Chemicals, Inc., Japan

SO PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002088216	A1	20021107	WO 2002-JP4140	20020425
	W: CN, JP, KR, US				
	RW: DE				

11/1/02

EP 1298156	A1	20030402	EP 2002-722782	20020425
R: DE				
US 2003187168	A1	20031002	US 2002-312506	20021227
PRAI JP 2001-132434	A	20010427		
JP 2002-64653	A	20020311		
WO 2002-JP4140	W	20020425		

AB Polycyclic olefins are subjected to ring-opening metathesis polymerization and hydrogenation, hydrofluorination or fluorination to prepare polymers having absorption coefficient $<3.0 \mu\text{m}^{-1}$ at 157 nm. Thus, 5 g 5-trifluoromethylbicyclo[2.2.1]hept-2-ene in 50 mL THF was mixed with 91 mg W(N- 2,6-Me₂C₆H₃)(CHCHCMe₂)(OBu-tert)₂(PMe₃) for 16 h, stirred with Bu aldehyde to end the reaction, dissolved (2 g polymer powder) in decahydronaphthalene, and hydrogenated in the presence of Pd/C to prepare 1.25 g polymer.

IT 133205-29-5DP, hydrogenated
 RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); PREP (Preparation); PROC (Process)

(fluorinated cycloolefin polymers and processes for preparation of fluorinated cycloolefin monomers and polymers and use thereof)

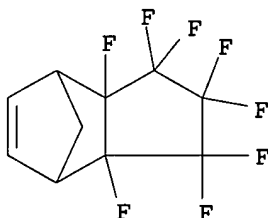
RN 133205-29-5 CAPLUS

CN 4,7-Methano-1H-indene, 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 133205-28-4

CMF C10 H6 F8



IT 133205-29-5P
 RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); RCT (Reactant); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(fluorinated cycloolefin polymers and processes for preparation of fluorinated cycloolefin monomers and polymers and use thereof)

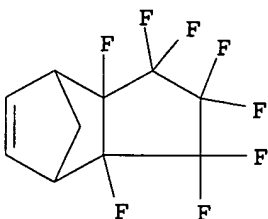
RN 133205-29-5 CAPLUS

CN 4,7-Methano-1H-indene, 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 133205-28-4

CMF C10 H6 F8



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:400334 CAPLUS
DN 136:409061
TI Fluorinated cycloalkane-condensed norbornene-type polymer, photoresist composition, and formation of pattern
IN Harada, Yuji; Hatakeyama, Jun; Watanabe, Atsushi; Kawai, Yoshio; Sasago, Masaru; Endo, Masataka; Kishimura, Shinji; Otani, Michitaka; Miyazawa, Satoru; Tsutsumi, Kentaro; Maeda, Kazuhiko
PA Shin-Etsu Chemical Industry Co., Ltd., Japan; Matsushita Electric Industrial Co., Ltd.; Central Glass Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002155119	A2	20020528	JP 2001-266788	20010904
PRAI	JP 2000-271306	A	20000907		

AB The polymer involves norbornene-type repeating unit I (R1, R2 = H, C1-20 linear, branched, or cyclic alkyl; R1-R2 may form ring made of C1-20 linear, branched, cyclic alkylene, O, S, NH; j = 2-4; k = 0, 1) and another repeating unit containing an acid-unstable group. The photoresist composition contains the polymer and an organic solvent and an acid-generating agent may further be added to the composition to give a chemical-amplified pos.-working photoresist. The composition is applied on a substrate, heated, exposed to high energy beam at 110-180 nm or 1-30 nm wavelength through a photomask, and developed optionally after heating to form a pattern. The photoresist shows enhanced transparency to high energy beam, preferably F2 excimer laser, Ar2 excimer laser, or soft x-ray, and dry etching resistance.

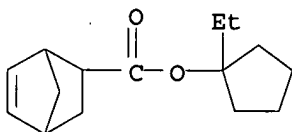
IT **430429-07-5P 430429-09-7P 430429-10-0P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluorinated cycloalkane-condensed norbornene-type polymer for (chemical-amplified) pos.-working photoresist)

RN 430429-07-5 CAPLUS
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-ethylcyclopentyl ester, polymer with 2,5-furandione and 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)

CM 1

CRN 279243-69-5

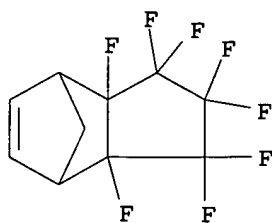
CMF C15 H22 O2



CM 2

CRN 133205-28-4

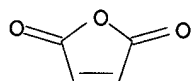
CMF C10 H6 F8



CM 3

CRN 108-31-6

CMF C4 H2 O3



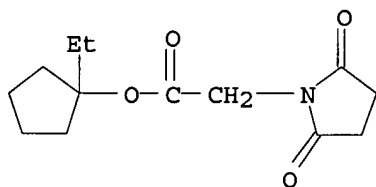
RN 430429-09-7 CAPLUS

CN 1-Pyrrolidineacetic acid, 2,5-dioxo-, 1-ethylcyclopentyl ester, polymer with 2,5-furandione and 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)

CM 1

CRN 430429-08-6

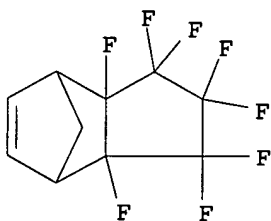
CMF C13 H19 N O4



CM 2

CRN 133205-28-4

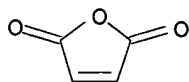
CMF C10 H6 F8



CM 3

CRN 108-31-6

CMF C4 H2 O3



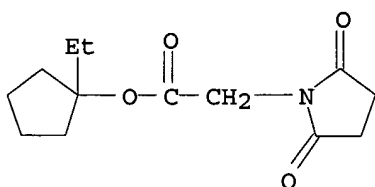
RN 430429-10-0 CAPLUS

CN 1-Pyrrolidineacetic acid, 2,5-dioxo-, 1-ethylcyclopentyl ester, polymer with 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene and 1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 430429-08-6

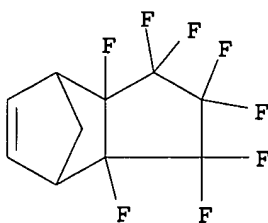
CMF C13 H19 N O4



CM 2

CRN 133205-28-4

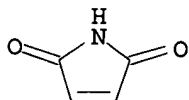
CMF C10 H6 F8



CM 3

CRN 541-59-3

CMF C4 H3 N O2



L17 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

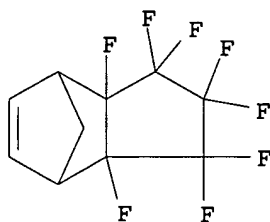
AN 1993:102781 CAPLUS

DN 118:102781

TI Transition metal catalyzed metathesis polymerizations of partially fluorinated norbornene derivatives

AU Seehof, Norbert; Mehler, Christof; Breunig, Stefan; Risse, Wilhelm

CS Fb. Phys. Chem.-Polym., Philipps Univ., Marburg, W-3550, Germany
 SO Journal of Molecular Catalysis (1992), 76(1-3), 53-63
 CODEN: JMCADS; ISSN: 0304-5102
 DT Journal
 LA English
 AB Ring-opening olefin metathesis polymerization (ROMP) of partially fluorinated norbornene derivs. with a catalyst based on WCl₆ gave amorphous poly(1,3-cyclopentenylenevinylene) derivs. with high glass transition temps., low indexes of refraction and good oxidative and thermal stability. The influence of the substitution pattern on monomer reactivities and polymer properties was investigated. Exo-substituted monomers were more reactive than the corresponding endo isomers.
 IT 133205-29-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)
 RN 133205-29-5 CAPLUS
 CN 4,7-Methano-1H-indene, 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 133205-28-4
 CMF C10 H6 F8



L17 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1993:102563 CAPLUS
 DN 118:102563
 TI Selective reaction with exo-isomers in ring-opening olefin metathesis polymerization (ROMP) of fluoroalkyl-substituted norbornene derivatives
 AU Seehof, Norbert; Grutke, Stefan; Risse, Wilhelm
 CS Fachbereich Phys. Chem.-Polym., Philipps Univ., Marburg, W-3550, Germany
 SO Macromolecules (1993), 26(4), 695-700
 CODEN: MAMOBX; ISSN: 0024-9297
 DT Journal
 LA English
 AB Fluoroalkyl-substituted bicyclic and tricyclic olefins were polymerized by ROMP. The monomers used were mixts. of exo- and endo-isomers of 5,5,6-trifluoro-6-(trifluoromethyl)spiro(bicyclo[2.2.1]hept-2-ene-7,1'-cyclopropane), 5,6-difluoro-5-(trifluoromethyl)-6-(heptafluoroisopropyl)bicyclo[2.2.1]hept-2-ene, and 2,3,3,4,4,5,5,6-octafluorotricyclo[5.2.1.0^{2,6}]dec-8-ene obtained by the Diels-Alder reaction of cyclopentadiene and spiro[2.4]hept-4,6-diene with perfluorinated olefins. The polymns. were carried out with a conventional catalyst based on WCl₆. The exo-isomers were more reactive than the corresponding endo-isomers. This difference in reactivity was larger for monomers containing larger substituents. A model based on steric repulsion was proposed to describe the selectivity for polymerization of the exo-isomers.
 IT 146236-53-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and structure of)
 RN 146236-53-5 CAPLUS
 CN 4,7-Methano-1H-indene, 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-

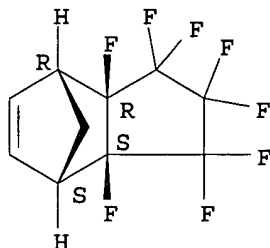
hexahydro-, (3 α ,4 α ,7 α ,7 α)-, polymer with
(3 α ,4 β ,7 β ,7 α)-1,1,2,2,3,3,3 α ,7 α -octafluoro-
2,3,3 α ,4,7,7 α -hexahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)

CM 1

CRN 145985-66-6

CMF C10 H6 F8

Relative stereochemistry.

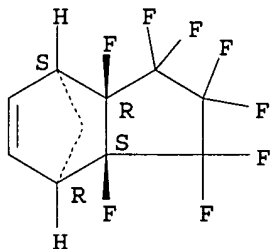


CM 2

CRN 145921-50-2

CMF C10 H6 F8

Relative stereochemistry.



L17 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:186242 CAPLUS

DN 114:186242

TI Ring-opening olefin metathesis polymerization of fluoroalkyl-substituted polycyclic olefins

AU Seehof, Norbert; Risse, Wilhelm

CS Fachbereich Phys. Chem.-Polym., Philipps Univ., Marburg, 3550, Germany

SO Makromolekulare Chemie, Rapid Communications (1991), 12(2), 107-12

CODEN: MCRCD4; ISSN: 0173-2803

DT Journal

LA English

AB 5-Fluoro-5-pentafluoroethyl-6,6-bis(trifluoromethyl)bicyclo[2.2.1]hept-2-ene (I), 5,6-difluoro-5-heptafluoroisopropyl-6-trifluoromethylbicyclo[2.2.1]hept-2-ene (II), 2,3,3,4,4,5,5,6-octafluorotricyclo[5.2.1.0^{2,6}]dec-8-ene (III), and 2,3-bis(trifluoromethyl)-7-oxabicyclo[2.2.1]hepta-2,5-diene (IV) were prepared by Diels-Alder reaction of cyclopentadiene or furan and the corresponding perfluorinated dienophile. Ring-opening metathesis polymerization of I, II, and

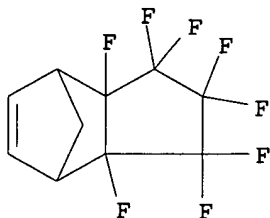
III using WCl₆-Ph₄Sn catalyst and of IV using RuCl₃ catalyst gave amorphous transparent polymers with good mech. stability. Increasing the size and number of fluoroalkyl substituents on the cyclopentenylene unit gave

IT 133205-29-5P

RN 133205-29-5 CAPLUS

CM 1

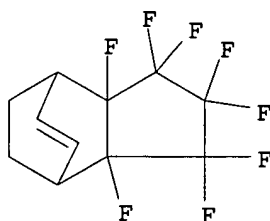
CMF C10 H6 F8

 \Rightarrow

L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 479195-53-4 REGISTRY
 CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer
 with 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-hexahydro-4,7-ethano-1H-
 indene and 1-ethyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)
 MF (C11 H8 F8 . C8 H11 F3 O2 . C6 H7 N O2)x
 CI PMS
 PCT Polyacrylic, Polyether, Polyvinyl
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

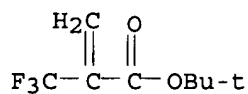
CM 1

CRN 479195-49-8
 CMF C11 H8 F8



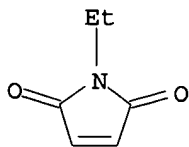
CM 2

CRN 105935-24-8
 CMF C8 H11 F3 O2



CM 3

CRN 128-53-0
 CMF C6 H7 N O2



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L17 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1993:102781 CAPLUS
 DN 118:102781
 TI Transition metal catalyzed metathesis polymerizations of partially
 fluorinated norbornene derivatives
 AU Seehof, Norbert; Mehler, Christof; Breunig, Stefan; Risse, Wilhelm
 CS Fb. Phys. Chem.-Polym., Philipps Univ., Marburg, W-3550, Germany
 SO Journal of Molecular Catalysis (1992), 76(1-3), 53-63
 CODEN: JMCADS; ISSN: 0304-5102
 DT Journal
 LA English
 AB Ring-opening olefin metathesis polymerization (ROMP) of partially fluorinated
 norbornene derivs. with a catalyst based on WCl₆ gave amorphous
 poly(1,3-cyclopentenylenevinylene) derivs. with high glass transition
 temps., low indexes of refraction and good oxidative and thermal
 stability. The influence of the substitution pattern on monomer
 reactivities and polymer properties was investigated. Exo-substituted
 monomers were more reactive than the corresponding endo isomers.
 IT 133205-29-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and properties of)
 RN 133205-29-5 CAPLUS
 CN 4,7-Methano-1H-indene, 1,1,2,2,3,3,3a,7a-octafluoro-2,3,3a,4,7,7a-
 hexahydro-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 133205-28-4
 CMF C10 H6 F8

